



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 09/636,286 | 08/10/2000 | Robert Arthur Giddings | RD-27,791 | 7072 |
| 25101 | 7590 | 10/27/2003 | EXAMINER | |
| PHILIP D FREEDMAN, PC 6000 WESTCOTT HILLS WAY ALEXANDRIA, VA 22315 | | | HOFFMANN, JOHN M | |
| | | | ART UNIT | PAPER NUMBER |

1731

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|---|--------------------------------------|--|--|
| <p style="text-align: center;">Office Action Summary</p> | Application No. 09/636,286 | Applicant(s) GIDDINGS ET AL. | |
| | Examiner John Hoffmann | Art Unit 1731 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8,9,20 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8,9,20,22,23,27,29 and 30 is/are rejected.
- 7) ☒ Claim(s) 25-26, 28, 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

Claims 1, 4, 5, 8-9, 20, 22-23, 27 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art teaching in view of Palmquist 4430109.

Applicant admits that the drawing of molten glass to form glass articles is well known. See the Background of the Invention section of the present application. The Prior art teaching does not disclose the gas or the lining. Palmquist discloses a superior furnace that has "enhanced thermal efficiency" (col. 1, line 15). It would have been obvious to create the molten glass of the prior art method by using the Palmquist furnace for the advantages that Palmquist discloses. Relevant portions of Palmquist include figure 1 and col. 4, lines 46 and 50, and col. 5, line 8.

It is deemed that the broadest reasonable interpretation of "hydrogen carrier gas" is --any gas which comprises hydrogen). Col. 9, line 69 discloses air - which comprises a "hydrogen carrier gas". And/or see col. 2, line 66; water vapor comprises hydrogen atoms. Col. 2, line 66 also discloses an oxidizing gas (oxygen or reaction byproducts see col. 2, line 66).

Claim 4: it is not indicated what fuel is used (col. 9, line 67). It would have been obvious to use a hydrocarbon fuel - because such fuels are inexpensive readily available. Water vapor is a by-product of combustion of hydrocarbon fuels. Water vapor is deemed to be a carrier gas and an oxidizing gas. (See col. 2, line 66)

Claim 5 is clearly met (col. 10, line 36 and elsewhere).

Claims 22-23: it would have been obvious that the air would have water vapor in it.

Claims 8-9, 27 are clearly met.

Claims 29-30: see col. 5, lines 55-58. One would expect to have the same results as applicant has - because the two methods are substantially the same. Alternatively, it would have been obvious to have as low a contamination as possible so as to maintain the purity, and prevent the loss of furnace material.

Response to Arguments

It is argued that claim 1 was amended to incorporate the limitations of claim 3. This is not convincing; see how claim 1 is now rejected. Claim 3 did not read on "hydrogen carrier gas" - but present claim 1 does.

The arguments and/or the amendments are sufficient so that no 35 USC 112 rejection would be appropriate.

Allowable Subject Matter

Claims 25-26, 28, 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Antczak and Jung are cited as being related to the disclosed invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

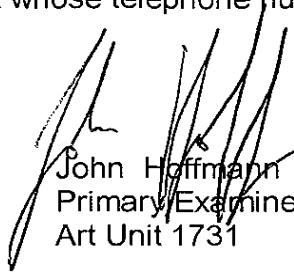
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/636,286
Art Unit: 1731

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


John Hoffmann
Primary Examiner
Art Unit 1731

10-16-03

jmh